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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,706	01/16/2004	Jeffrey R. Hedrick	10541-1884 (V203-0212)	7126

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EXAMINER

CASTRO, ARNOLD

ART UNIT PAPER NUMBER

3747

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/758,706	Applicant(s) HEDRICK ET AL.	
	Examiner Arnold Castro	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-8, 10-14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Daly (US/6,431,144).

3. Daly discloses a method the steps of: for ensuring operation of a motorized throttle, comprising detecting the presence of ice inside the motorized throttle; removing the ice to free the motorized throttle; and recording a closed throttle position as a zero degree reference from which to control a throttle plate to a desired angle, The method of detecting the presence of an obstruction inside a motorized throttle, comprising the steps of: recording a default position of a throttle plate applying a predetermined voltage to the throttle motor in the closing direction for a predetermined time; recording a closed position of the throttle plate; determining a first displacement between the recorded default position and the recorded closed position', and identifying an obstruction if the first displacement is less than a predetermined displacement. Further comprising the steps of verifying the absence of defined faults and reporting the presence of an obstruction to a control module reporting a frozen throttle condition if a throttle temperature is less than a predetermined temperature. (Col. 3, lines 40-76)

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Daly describes the method of removing the ice inside a motorized throttle, the throttle having a throttle plate, comprising the steps of: applying a predetermined voltage to a throttle motor in a first direction', and applying the predetermined voltage to the throttle motor in a second direction at a set frequency (e.g. within respective time period). The effect of applying the voltages is to bang the throttle plate to clear the ice. Inherently the voltage is 12VDC since that is the voltage of an automobile.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 15, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daly (US/6,431,144). Daly applies as in claims 3, 14, and 17 above. However, the specific time periods claimed are not expressly disclosed. In col. 3 lines 39-40 therein Daly expresses that the controller (32) monitors the amount of time the frequencies are applied.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to limit the time to the time claimed because Applicant has not disclosed that there times provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the

claimed times because the times are of strictly convenience and do not effect the operation of the invention.

Therefore, it would have been an obvious matter of design choice to modify Daly to obtain the invention as specified in claims.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly (US/6,431,144).

7. Daly applies as in claim 5 above. However, the specified degree of tolerance in throttle angle measurement as claimed is not expressly disclosed. The throttle position is inherently the throttle angle.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to set the tolerance of the zero angle to the claimed 7 degrees because Applicant has not disclosed that this degree provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the claimed 7 degrees, Because the claimed degrees is just a tolerance factor to negate false negative and does not effect the operation of the invention. Therefore, it would have been an obvious matter of design choice to modify Daly to obtain the invention as specified in claims.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly (US/6,431,144).

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9. Daly applies as in claim 17 above. However, Daly specifies various torques in dislodging the ice. The claimed maximum steady torque is just the upper limit of the torques applied by Daly

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to apply the torque claimed because Applicant has not disclosed that this specific torque provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the claimed torque, Because the claimed torque is just the maximum torque of the throttle motor does not effect inversely effect the operation of the invention. Therefore, it would have been an obvious matter of design choice to modify Daly to obtain the invention as specified in claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art are electrical throttle valves having means of identifying ice lodge in throttle valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold Castro whose telephone number is (703) 305-0039. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yuen Henry can be reached on (703) 308-1946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Arnold Castro
Examiner
Art Unit 3747

AC